**Note:** This document is hosted here for archival purposes only. It does not necessarily represent the values of the Iron Warrior or Waterloo Engineering Society in the present day.

Friday, March 31, 2000

The Newspaper of the University of Waterloo Engineering Society

Volume 24 Issue 6

# **Teaching Excellence Awards**

In 1998, the Faculty of Engineering with the assistance of the Sandford Fleming Foundation, established an award to recognize outstanding teaching. The award provides recognition for outstanding teachers in Engineering who have not received the University's Distinguished Teaching Award.

This year three winners were selected by the Faculty of Engineering Annual Performance Review Committee as part of its assessment of all Engineering faculty members. The winners for 2000 are Tom Duever of Chemical Engineering, Magdy M. A. Salama of Electrical and Computer Engineering, and Glenn Heppler of Systems Design Engineering.

The winners of the award each receive a certificate, and funding for two Undergraduate Research Assistants. Also, their names are listed in the calendar, and their names will be recorded on a plaque in Carl Pollock Hall foyer.

Prof. Tom Duever teaches the introductory course Ch E 101, Statistics for Engineers (Ch E 022), Engineering Economics (Ch E 044) and Introduction to Process Control and Optimization Ch E 041). Prof. Duever also teaches the graduate course Ch E 622, Applied Statistics in Engineering and Science. Ch E 622 is a very popular graduate course attracting students from across Engineering and even Science, and was moved into the winter term so that it could be offered as a technical elective to 4B chemical and environmental chemical engineering stu-

Prof. M. Salama has been a part of the Electrical and Computer Engineering department since Fall 1990. He has taught the energy systems course E&CE 261, 464, and ME 269. He also helped to design the double weight first year course, E&CE 100. Prof. Salama has also been involved in the development of the first year circuits course GEN E 123 which is offered to engineering students in other disciplines. During 1999, he taught to mechanical, systems design, and electrical and computer engineering students, as well as overseeing seven graduate stu-

The third winner of the Teaching Excellence Award is Prof. G. Heppler of Systems Design Engineering. Prof. Heppler serves as the Systems Design Undergraduate Associate Chair, while maintaining a high level of research, productivity, and an exceptional teaching record. In recent years, he has frequently taught SYDE 281, Mechanics of Deformable Solids, and SYDE 352, Introduction to Control Systems. Prof. Heppler has introduced specialize course software (ZAP!) along with the use of Maple into the controls course. He has also introduced design projects into the controls course, and the cardboard bridge design project in the mechanics of deformable solids course. In addition to the above, Prof. Heppler has also introduced the graduate level course SYDE 553, Advanced Dynamics.

Congratulations to Professor Duever, Professor Salama and Professor Heppler on receiving the Sandford Fleming Foundation University's Distinguished Teaching Award for the year 2000.

# **Debt Survey Results**

**Engineering Co-Op Student Debt-Load Survey** Winter 2000

**Term Total** 2A ЗА 3B

4B Number of surveys Total Responses 1549 Response %

Does your family support you financially? (500 responses) 2 Yes

Average Cost of Living for a 4 month School Term (114 responses)

Average Cost of Living for a 4 month Work Term (281 responses)

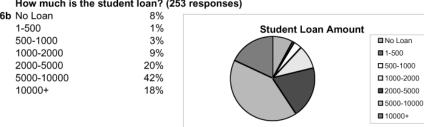
Have you applied for bursaries, etc., to pay for school? (494 responses)

No Not Yet 27%

Do you have a student loan (505 responses)

6 Yes 45% No 42% Not Yet 12%

How much is the student loan? (253 responses)



Has the differential tuition increases caused you hardship? (490 responses) 7 Yes 50%

18% Νo 32% Not Yet

How much debt do you expect to be in by graduation? (489 responses) 8 No Debt **Amount of Debt after Graduation** <1000 1000-5000 20% 25% 5000-10000 19% 20% 10000-20000 21% 15% 20000+ 11% 10% 5% 0% No <1000 1000-5000-10000- 20000+ 5000 10000 Debt 20000

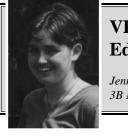
Do you live at home while at school? (500 responses)

Used to

Have you lived at home while on work terms? (481 responses)

Sometimes 48% Neve

Average of the weekly salary while on work term



VP **Education** Jenn Motuz 3B Mechanical

Well, it's that time again: rushing around for notes and solution sets, \*actually\* attending our lectures in hopes of a review session, (for some of us) finally meeting our TA's, and of course, for the 4Bs, the last lecture ever.

Before we all head off to study 20 hours/day in hopes of returning to do it all again this fall, here's a little bit of info on what's been happening on the Education scene and what to expect in the fall.

#### **Debt-Load Survey Results:**

Well, the survey was a success with 33% response rate (not too shabby). Dean Chaudhuri would like to see this take place every winter and spring term to be able to track how the students are doing financially over time. The overall results are to your left and breakdowns by term can be looked at in the Orifice.

#### **Final Exam Tidbits:**

Here's a bit of information I dug up from the Educational Policies: all students are allowed to see their marked final exams, so if you're worried about how you did, or want to see how you were marked, just ask the professor.

#### This Fall: Get yourself some \$\$\$

I think that I've got your attention now. In response to a large number of students unaware that we can apply for Bursaries, I'm putting together a bursary FAQ which will be online this summer. This will outline what you need to do to qualify for a bursary and when the deadline is. If you want to apply for one, make sure you apply for OSAP \*even if you don't think you'll get it\*. The bursary application process allows for this, so if you're rejected by OSAP you actually have a better chance at getting a bursary. Look for more info from your academic

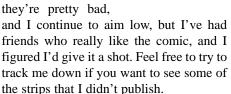
So there you go. Best of luck to everyone on their finals and have a great time on your workterms.

In This Issue
Editor's Rant       2         Explorations       2         Women in Engineering       2         Bitter Rant       3         Restaurant Review       3         The Big Picture       4         Arts       5         Exec Reports       6         No Fixed Address       8

### That's It! I Resign!

It's odd. In some ways I'm quite glad to be writing my final editor's rant, and in other ways, I'll miss having this forum to prove what a raving lunatic I am. Admittedly, some of what I've written has made sense, but in other ways, I'm sure it's been obvious that I was writing the

rant at 3 in the morning. On that note, Mutant Dog hasn't been a delusional tired piece of work. I've actually been "drawing" Mutant Dog comics since high school. Personally, I think they're pretty bad,



What else has been fun about working on the Iron Warrior? I had the chance

to meet a number of people, both on and off campus. While the Engineering Society is kind enough to fund most of the costs of this newspaper, it would be hard to print it without advertisers. Also, I've had a chance to learn. A few new functions in Photoshop will come in handy for the

Editor's

by Ryan Bayne

Rant

future, and I can always put Quark XPress on a resumé, even though I doubt I'll be applying to graphic design co-op jobs.

Surprisingly deadlines have been a bit of a joke this term. I set them two days

early in most occasions, except for when I made the mistake of setting the deadline during Reading Two Days. This still doesn't avoid the problem of people sending me articles on the final day before sending the paper out to the printer. The worst was the one article I received approximately

ten minutes before I burned the issue to disc. Surprisingly enough, that article ran in the following week's paper.

Finally, I want to thank a few people for helping out this term. Will Patterson has been extra keen this term, writing restaurant reviews without even being compensated. Jasen Higgins has been great with his tales from Europe, and he isn't even a student anymore. Raymond Ho has once again provided his view of the big picture every issue. Aaron Egier has made it possible for the Iron Warrior to be printed, by lending me his CD burner every two weeks (and sometimes longer when I want to burn my own discs) in order to get the paper to the printers. Daniel Clarke and Margaret Parkhill have been great in helping out with layout and distribution of the Iron Warrior. And finally, Jessica Gross has helped me out with the layout, often resulting in me showing up to start work on the newspaper and finding it half done. Thanks to everyone for helping out this term.

### **EIRON®WARRIOR**

The Newspaper of the University of Waterloo Engineering Society

Editor - in - Chief Ryan Bayne

Assistant Editors Margaret Parkhill Daniel Clarke

Layout Editor Jessica Gross

#### Staff

Aaron Egier Sasha Gutfraind Jasen Higgins Raymond Ho Will Patterson Micah Potechin Ian Tien

#### Contributors

Jon Bida
Mark Cesana
Peter Cresswell
Niki Czerniak
Jenn Motuz
Navindra Persaud
Ian Pollock
Sunny Sodhi
Stephanie Thompson
D. J. Swan

### Women In Engineering

STEPHANIE THOMPSON Women In Engineering Director

Contrary to popular belief, the Women in Engineering Wine and Cheese, which was held Wednesday March 22nd in the DC fishbowl, was not a glorified male bashing session with free food and drinks. The main focus of this event was to present an opportunity for women of all

disciplines and years, as well as professors, and grad students to meet and talk about things that interest them. This term's event brought out undergrads from every discipline as well as various profs and grad students, and even two British exchange students who gave a decidedly interesting outlook on Canadian versus English University life. I even met my first female computer engineer, which was

my goal for the night.

Being in a discipline that is 50% female (chem eng.), I have never felt the need to establish myself as a woman in a male dominated faculty. But for the majority of the engineering faculty, there is little opportunity for women to interact with female peers.

Please see "Wine & Cheese" on page 3.

### Rugby Tournament a Success!

NIKI CZERNIAK Athletics Director

The sun shined bright and the air was crisp and 10 am seemed a bit too early to be up on the day after St. Patrick's Day. Nonetheless, players started trickling onto the field ready for a day filled with running, tackles, and of course... scrums!

Seven full teams, eventually, showed up and put in a good day of rugby. With each team guaranteed 3 or more games and with some teams playing back to back, there were a lot of tired faces by the end of the day.

All the teams put up a good fight, but it was the "Untouchables" that prevailed. The top team composed entirely of engi-

neers was "Brett's Bullies" (and may I remind you all that if you don't make up your own team name, you will become victim to my sense of creativity - or lack there of)

Congratulations to the prize winners and a great job done by all! I just hope all of you who took part aren't suffering the after-effects of sunburn - such as myself.

#### NAVINDRA PERSAUD Explorations Director

Well another successful Explorations has come and gone. Patrick and I would like to thank the 91 volunteers who showed up to make the evening a success. We would also like to thank the Professors and students who did a great job at the different displays. Finally a special thanks to the guys in hard hats, bright safety vests and walkie-talkies, Professor Roydon Fraser who organized the tours, Sue Gooding who fed us well and Karen Dubois who provided us with our t-shirts and was security for the evening. The surveys students have filled out about the evening have been very positive; they and their parents learned a lot and are now considering engineering as a future occupation (the brain washing actually worked). Most parents commented on how friendly and personable the guides were, however a few also commented on the fact that their guide got lost, but that's ok. The fact that most people wanted the evening to be longer and also want us to host it for more than one night shows how much they enjoyed their few hours with us. We also raised over \$340 for the Rotary Children's Center. So as you can see the whole night was, as Micah would put it "Excellent."

# Explorations and Campus Day Volunteers

## Thank You

The Faculty of Engineering would like to thank all those students who took time away from their studies to help out at Explorations and Campus Day.

Without your generous support Explorations and Campus Day would be a shadow of what they are today. Thank you.

Mandhuri

**The Iron Warrior** is a forum for thought provoking and informative articles published by the Engineering Society. Views expressed in **The Iron Warrior** are those of the authors and do not necessarily reflect the opinions of the Engineering Society.

The Iron Warrior encourages submissions from students, faculty and members of the university community. Submissions should reflect the concerns and intellectual standards of the university in general. The author's name and phone number should be included. All submissions, unless otherwise stated, become the property of The Iron Warrior, which reserves the right to refuse publication of material which it deems unsuitable. The Iron Warrior also reserves the right to edit grammar, spelling and text that do not meet university standards. Authors will be notified of any major changes that may be required.

Mail should be addressed to **The Iron Warrior**, Engineering Society, CPH 1323B, University of Waterloo, Waterloo, Ontario, N2L 3G1. Our phone number is (519) 888-4567 x2693. Our fax number is (519) 725-4872. E-mail can be sent to iwarrior@engmail.uwaterloo.ca

# My Last Bitter Rant

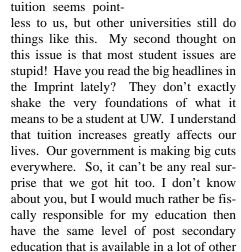
Well, my undergraduate career at the University of Waterloo is about to come to an end. In this length of time I have seen a lot of things change and a lot of things stay the same. The most amazing thing is what you can see while you sit on a barstool.

One of the things that has always baffled me is the use of volunteers. It is amazing what you can get done with absolutely no money. You just ask students to give up large quantities of their time and they do! For some stuff like Frosh Week, you can actually convince people to give up entire weeks of time and pay money to do it! There is also the entire process where people apply for directorships. A process based on people hoping to give up more time on the bigger directorships. Keep in mind that I don't regret volunteering for any of the things that I have done, I am just surprised at how easy it is to get slave labour to help do something. It took probably about 15, 000 man hours to run frosh week. Just imagine how much it would cost each Frosh if we had to pay all of these leaders minimum wage.

My next beef is with people who whine about student apathy. I didn't completely understand why students at this

university really don't care about a lot of the big issues in life until the last little while. The best answer is: Why should they? It was pointed out to me once that the Co-op system tends to give a higher

level of professionalism to its students. After you have worked in a cubicle for at least 4 months you see things a little differently. The concept of organizing something like a "sit in" to protest rising



countries across the world.

Bitter? Me?

by D.J. Swan

Engineering

4B Civil

Is the University of Waterloo that bad a place? Everyone says that Engineering is such a great program here. Are they all wrong? People should just appreciate

what they have because most don't know how fortunate they really are. Do you honestly think that English is the first language of all the TA's at every other school?

I also believe that co-op is meeting

their objective. Co-op tries to place as many students as they can in the appropriate jobs. They still have the rather impressive placement rate that you heard when you were considering coming here. They do have a few problems, and nobody will argue that. But, is it fair to expect co-op to provide the perfect job for each and every one of the thousands of students they are supposed to serve every term? On top of this, we expect them to do it with only jobs that exist in the marketplace. When was the last time you saw any other organization do this as effectively. If you have a better solution, then I am willing to bet

that they would love to hear it.

And finally, I would like to impart a little advice on anyone still willing to listen to me after reading all of that. Now I remember way back when. Having to listen to what all of the previous 4th years used to say. I used to ignore them all, like all of you will probably ignore me, but I am going to say it anyways.

- 1. Question EVERYTHING. You would probably be surprised to find out how many times there isn't a reason.
- 2. Only get involved in the things you want to do. Your time is valuable, so balance it wisely.
- 3. Don't forget your academics. Parents don't always understand that there is more to university then the classroom.
- 4. If you don't like something, try and change it. Remember that your vote is just as important as everyone else's and if you have a good reason, then others will listen.
- 5. The only way things will get done is if you do them yourself. If you leave something half done, the next person is just as likely to reverse your decision as finish your work.

Well, I should stop this now. I hope everyone just learns to appreciate how lucky they really are to be here. Well I should go study for my finals now...

# Yes, You Can Still Get Ice Cream

WILLIAM PATTERSON
3A Environmental Chemical

This week, for the last IW for this term, Yuki and I went to Pemi's Grill/Diner in University Plaza. We walked into a bright, warm, friendly atmosphere and took a seat. There were chrome plated high stools, chrome-plated chairs and benches. All seats were covered with a metallic green vinyl, which

was surprisingly comfortable. The seating matched the décor in colour scheme, and the use of mirrors on the walls. The walls were blue, and the ceiling was sky blue with light red/pink/purple mottled throughout. We browsed through the lunch menus as they were sitting with the sugar and condiments. We noticed that breakfast is served all day, but costs a dollar more after 11:00.

For a diner, there was a decent selec-

tion of food and beverages available. Our server greeted us shortly, and asked if we were ready to order. Yuki ordered the Famous Homemade Breakfast including hash browns, bacon or ham, two eggs, beans and toast with iced tea to drink(\$6.08).

I ordered a roast beef sandwich combo (\$5.10), which includes fries and iced tea. Service was quick, as it was the prime lunch rush (12:15 p.m.) and we

received our meals within 10 minutes. My meal was simply presented with the sandwich taking up about half of the plate and the fries taking up the other half. The sandwich was very thick; as the slices of bread were thick, there was a good pile of meat, crispy lettuce and freshly sliced tomatoes & onions on it. The fries were a little too greasy for my taste. The fries had potato skins on them, adding a bit more crispiness. The sandwich was like any other, with moist, fresh bread and good, juicy meat. My iced tea was sweet, and the powder wasn't completely dissolved, so it could still be tasted (giving a slightly gritty texture).

Yuki decided to

have sunny-side up eggs and bacon that were pretty good except that the bacon was a bit over-cooked. The hash browns, were ok but they were a bit too greasy, even though they were grilled instead of deep fried. It's definitely a good choice for anyone who likes fried food.

Yuki really enjoyed the beans and toast with jam because the beans were tasty and there were four half pieces of toast which could keep you full till dinner even though it was meant to be a breakfast. Yuki's iced tea was good because it was sweet and cold enough to cool her down in this early summer time.

Due to time constraints, we couldn't have dessert, but there was a good selection of them, including ice cream all year round. Most of the items are not unique to a diner, but if you want a good Canadian meal at a good price, then make your way over. I give this diner 3 1/2 stars and Yuki gave it 3 stars out of 5. Overall, 3 1/4 stars out of 5.

### Wine & Cheese

It is through events such as this that the issues involved with being a minority can be discussed. Regardless of popular belief, men and women are different, and they respond to situations in completely different ways. Judging from the close to fifty people who attended, there was definite merit for more attention to Women in Engineering events in future terms.

A big thanks to all those who came out, to the profs who showed interest and also to the Dean's office for their financial support. Hopefully, this event can serve to renew interest in this area from all those who have been involved in the past.



## I Hate Email

Email has been very good to me. It's been a valuable tool at the workplace. It's been an indispensable part of my university education. It's also let me keep in touch with friends and family all over the world.

That said, there is much I despise about technological wonder. And so I've dedicated an entire article to denouncement.

#### I hate spam

There's enough said about this subject

enough people in the past. Also, I have no doubt that everyone has received annoyingly useless emails before from unknown senders. So that's all I will say about it.

#### I hate FWDs

When people forward useless junk like chain letters, quizzes, jokes, and stories to me, I find it annoying. Some of these emails even urge you to forward the message to others, for example by threatening you with "bad luck" or promising you "a prize". Forwarded messages with large file attachments are ten times as irritating. On occasion, I may find these emails mildly entertaining. Sometimes, in fact, there are some real gems. Most of the time, however, these emails are met immediately with a pressing of the <Delete> key. If I really wanted to read these things, I could get on the Internet and find them myself.

#### I hate >>>> multiple FWDs

A message that is garbled with unnecessary characters will waste bandwidth and storage space unnecessarily. In addition, it's a telltale sign of a junk email. People should at least have the courtesy of cleaning up their text if they want somebody to read it.

#### I hate careless usage of Cc:

When it is necessary to send a mass email, people should be more thoughtful and careful of how they go about it. Most of the time, it is not necessary to display the addresses of every single recipient. Yet on many occasions, I have found myself scrolling through a list of hundreds of email addresses just to read a two or

three line message. This is a waste of space and it also makes the recipient list freely available for anybody to use. The simple solution: use "Bcc:" (blind carbon copy) instead, which hides the addresses from everybody.

**Picture** 

Raymond Ho

3A Mechanical

#### I hate Reply The Big

"Reply all" is close relative of "Cc:", and I think that rather than being an automatic command in some email programs, it should be a hidden

feature that requires seven different keystrokes to activate. Email exchanges such as "Congratulations Joe"-"Yeah, way to go"-"Thank you" are clearly idiotic and do not need to be sent to fifty individuals for their reading displeasure.

#### I h8 ppl wHo rItE LiKe dis!

For some odd reason, a lot of people seem to assume that normal spelling, grammatical, and other general linguistic rules don't apply to emails. Many people have deficient written communication skills to begin with, and it doesn't help the reader very much if he has to learn to decipher a new dialect in every email.

#### I hate messages that are urban myths and virus hoaxes

Everybody by now has heard that you shouldn't flash your headlights at night or you'll get shot. Everybody knows that each copy of that email sent will contribute five cents towards saving a little girl's life. And everybody was on the lookout for the Good Times virus. These types of emails are your typical junk, and they are typically annoying. What I do get a laugh out of, however, are the many people who actually believe these things.

#### I hate slow replies

Even worse than a slow reply is no reply. If your intended recipient doesn't check their email frequently, and you are aware of this, then a slow reply is acceptable. When people do receive your messages, however, it is frustrating when you do not get a timely reply. They should at least send a short, even automated reply, telling you that your message was received and that they intend to send a reply. Not only is this courteous, but in the workplace it is good business practice.

#### Other points to ponder

As an indication of the impact email has had on society, dictionaries now include "email" and even "emoticon" as real words. What I fear is that computer jargon and increasing keyboard laziness will continue to creep further into the norm, and that our already abominable communication skills will soon disintegrate altogether.

Email, as a communication tool, is a welcome addition to our daily lives. Problems have arisen, however, when we attempt to replace other forms of communication with email. In the workplace, how many times have you received an email from a co-worker who sits but ten paces away from you?

Greetings and cards sent via email are sometimes nice to receive, but I often find them lackadaisical and devoid of meaning. It just isn't the same as the real thing. Why not write a letter, or make a simple

Most people, I believe, have a lax attitude towards using email. They don't treat it as a serious form of communication. This attitude would be unacceptable in other forms of communication, such as in a spoken conversation, or in the wellknown memorandum, a prehistoric form

If we are going to use email as a replacement for other forms of communication, as I suspect will be the case in the future, then we had better learn to treat email as we have learned to treat our old communication tools. When writing a letter through email, treat it the same as you would a pen and paper. When composing a work-related email, treat it the same as a company memo.

I am grateful to have emailing capabilities, as much of my life is tied to it, and I could not imagine how I could live without it. But this beast has not yet seen enough evolution, and I can only hope that email, or should I say, our use of email, will someday evolve to the point of complete effectiveness.

# **Enigmatic**

JON BIDA **3A Computer** 

Enigma Variations, starring Donald Sutherland and John Rubinstein

I remember once being criticized for enjoying a play that featured only four characters; this one stars two. The play can be summed up, as a lengthy conversation of two people throwing witty remarks at one another for 2 hours. Many of the twists, that are shoved into the plot are predictable; I am not sure whether this is due to good acting or poor writing. Though slightly predictable, the play is hardly cliche. The set is dull, there is no intermission (thank god), and Donald Sutherland is a lot shorter than you would

Sutherland plays a world famous novelist, who, through his ridiculous eccentricity, has chosen to abandon civilization and live in seclusion on his own private Norwegian island. It was his latest novel that had drawn a newspaper reporter to his private island for an interview of sorts. The reporters simple questioning result in a more complex and twisted story than anyone in the theatre could have imagined. I suppose that the play was well named for this reason, that this deranged story, about the nature of love, started with some simple questions.

Though my opinion of the play might seem obvious at this point, it is not; it is one of the best plays I have seen in years. Enigma Variations is an intelligent and hysterical production of Eric-Emmanuel Shmitt's writing. Without ruining most of the play, it is best described by its title, so simple and complex, an Enigma of its

The production is presently at the Royal Alexandra Theatre in Toronto, until the April 1st. After the production leaves Toronto, it will find its way to Broadway, so if you cannot see it by the 1st of April, which is likely, then I recommend the trip to New York.

Information about the play can be found online at

http://www.onstagenow.com/



The Sandford Fleming Foundation **CPH 4306** 888-4008

Waterloo Campus Activities

sff@dean

#### The John Fisher Award for Leadership

The John Fisher Award for Leadership is made from time to time to a graduating student whose activities throughout his/her academic career have made significant contributions to Co-operative Engineering Education. Nominations for the Award can originate from student groups, faculty members and the Foundation. Nominations should document the nominee's contributions and include other support for the nomination. Contributions are to have a professional orientation and can involve student activities, the Sandford Fleming

Foundation work or other appropriate functions. Letters from colleagues, faculty members, and others knowledgeable of the nominee's efforts will be given consideration.

The Award at Convocation, consists of a Citation and an Honorarium of \$1,000. For more information, contact the Sandford Fleming Foundation. Nominations are to be addressed to Jeff Weller, Executive Secretary/Treasurer by April 1, 2000

#### **TRAVEL GRANTS**

The Sandford Fleming Foundation provides grant money to students for Conference Registration, Conference Presentations, Technical Team Projects and Non-Academic Professional Conferences.

No official "form" is required for travel grants. A letter addressed to the travel grants officer (Prof. Herb Ratz) can be delivered to the SFF office and should provide the following information:

- Name(s) of applicant(s);
- a contact telephone number and address;
- projected costs for the activity;
- the type of grant requested;
- a description of the event and the time/date & location of the event;

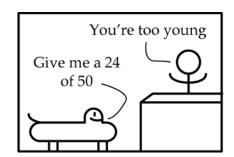
Only engineering undergraduates are eligible to apply, and only work carried out while at the University will be considered for grants

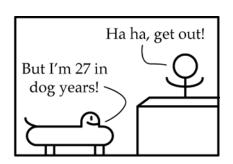


# Mutant Dog

Story by Ryan Bayne
3A Computer Engineering
Art by Nick Wolfe
(c) 2000







# Claiming KW's Culture

JESSICA GROSS
3B Chemical Engineering

In the last issue of the IW, I promised I'd talk a bit about the various cultural attractions in KW. But wouldn't you know it, my school work got in the way of more cultural pursuits. As a result, this isn't much of an article, but more of a contact list and some brief notes about galleries and museums in KW. I would suggest

calling the galleries before showing up to see if they are displaying something that would interest you.

#### Harbinger Gallery (747-4644)

The Harbiner Gallery is one of the closest to campus, located at 22 Dupont St. (at the corner of Dupont and Regina). It shows various media, including clay, jewellery, glass, and sculptures. It is open to the public Tuesday through Friday from

10:30 to 6, and on Saturdays from 10:30 until 5.

### Canadian Glass & Clay Gallery (746-1882)

This gallery is housed in an award winning building at 25 Caroline Street, and I would say that it is the gallery easiest to get to from campus. Just follow the trail next to the railroad in behind CPH all the way until Erb Street, and you're right

behind it. It's open Wednesday through Saturday from 10 until 5, and on Sundays from 1 to 5.

#### Peter Etril Snyder Studio (886-3230)

This studio feature the work of, you guessed it, Peter Etril Synder. He is a local artist and the Mennonites in the KW area are the inspiration for much of his work.

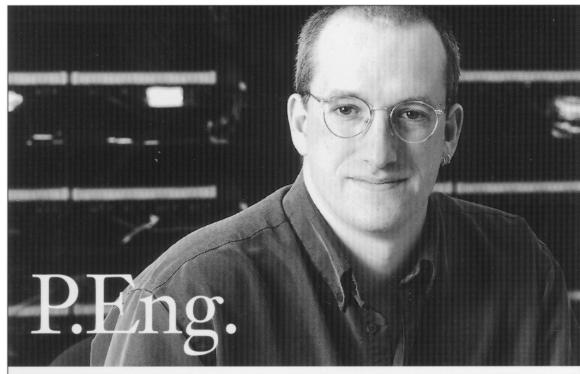
The studio is located at 59 Erb Street (right across the street from the LCBO) and is open Tuesday through Saturday from 9:30 to 5:30.

#### KW Art Gallery (579-5860)

Housed in the Centre in the Square at 101 Queen Street North in Kitchener, you can get to this gallery by taking the route 8A bus (Fairview via Courtland) from the stop across the street from the HMV on University. Get off at the corner of Margaret and Queen, and if you can't find it, then you should head to Optometry upon your return to campus! This gallery has over 3000 pieces in its permanent collection, and is currently showing a selection of these pieces. It is open Tuesday through Saturday from 10 until 5, and on Sundays from 1 until 5.

#### Rotunda Gallery at Kitchener City Hall

This gallery features the work of artists from the Waterloo Region. It is open to the public during City Hall hours, and the admission is free. Enjoy!



Steve Carkner, P.Eng., Director of Energy Research, Research in Motion

"I'm young, with just a few years of experience. My P.Eng. shows my employer that I'm serious about my job and about increasing my level of responsibility."

**P.Eng.** is the seal of engineering quality employers look for. Earning your **P.Eng.** designation is the way to tell the world:

- your degree from an accredited engineering program is second to none
- your internship experience meets the highest standards
- you are a true professional ready for a job and a career in engineering

It's a competitive advantage that will serve you now and throughout your career.

Go the distance. Get the P.Eng.



Find out more about the difference a P.Eng. can make to your career.

Visit us at www.PEng.ca



# An Ode to EDCOM

NIKI CZERNIAK 2A Geological

"E" is for educated -

The wisest leaders around;
Frosh learn to worship what they walk on
Cement, water, or plain old ground

Amazingly stylish in black; Holding heads high, walking around Keeping lowly frosh on track

"C" is for caring -Explaining the ropes; Sharing their knowledge And feeding frosh hopes

"D" is for debonair -

"O" is for original -One of a kind; Look in other faculties And no EDCOM you will find!

"M" is for myriad -28 members to be exact; Not as many as us humble frosh But wiser, that's a fact!

Frosh Week wouldn't be the same
If there was not EDCOM to run the games;
The facts are known by the orange team...
EDCOM rules supreme!

Association of Professional Engineers and Geoscientists of British Columbia • Association of Professional Engineers of Yukon

Association of Professional Engineers, Geologists and Geophysicists of Alberta • Association of Professional Engineers Geologists and Geophysicists of the Northwest Territories

Association of Professional Engineers and Geoscientists of Saskatchewan • Association of Professional Engineers and Geoscientists of Manitoba • Professional Engineers Ontario

I'Ordre des ingénieurs du Québec • Association of Professional Engineers and Geoscientists of New Brunswick • Association of Professional Engineers of Nova Scotia

Association of Professional Engineers of Prince Edward Island • Association of Professional Engineers and Geoscientists of New Moundland

# **Funding is Almost Complete**

Finals are now upon us. That means it is time to bury yourself in your books and learn 4 months of material in 5 days.

But in the world of WEEF it is time to give out some money. This term we had \$60,000 to allocate to labs and equipment to improve our undergraduate education as well as student projects



Mark Cesana 3A Mechanical

and teams. This term we had over \$176,344 requested from various departments and teams. I was pleased to see all of the quality proposals that were submitted and it is a shame that we cannot support them all. On Thursday, March 23, 2000 the WEEF representatives from all of the Engineering classes came together and as a funding council decided which proposals merited the \$60,000 we had to spend. It was a long night where each proposal was meticulously looked at and difficult decisions had to be made. There were many arguments and differences of opinion but by the end of the night a compromise was reached and the funding decision was unanimously passed. You can see the breakdown of the proposals and the money allocated to each proposal. If you would like more information on each individual proposal, they can be found on the WEEF webpage (http://

www.eng.uwaterloo.ca/groups/weef/).

Now on to some disappointing news. The total participation of students donating to WEEF is the same as the last two terms. A total of 65.66% of engineering students donated to WEEF this term. This is down from 66.4% in the fall and the same as the 65% from the last spring term. The individual class participation numbers can be seen in the accompanying table to this article. A special congratulations should go to all of the first year classes as well as the 2A, 3B, and 4B Systems classes who showed great support for WEEF. This is not surprising, as the System Design classes have always been large supporters of WEEF. Other classes that should be proud of their participation are the 4B Comp and 4B Enviro-Civ classes. This was one of the best participations by 4th year classes in many years. What concerns me is the poor support from most of the second and third year classes. As for these classes and all of the 36% of the students that got their money back....I don't know what to With the increased tuition and increased fees it has become harder to

afford to go to this university and it is understandable that people in financial NEED must get their money back to sur-

vive another term. But

it makes me cringe when I hear people saying that they are taking their WEEF money back to protest tuition hikes or that WEEF shouldn't exist because the university should provide everything students need. What most

people don't realize is that for every extra dollar you pay from a tuition increase only a fraction is spent directly on your department and even a smaller fraction is spent on lab and equipment upgrades. If we want to see up to date technology and gain hands on experience on equipment that is used in industry than it is up to us try and improve our labs.

That is the beauty of WEEF. It is simple, it is student run, and almost every dollar you invest comes back out to improve your education. We contribute every term and we spend the money the way we want. The added bonus of the endowment fund is that it will continuously grow and become more and more powerful. WEEF was created because some students had the foresight to realize that it was their responsibility to look after themselves and their education. I think it is time that every student realized this. I hope every student decides to take an active role in their education and support WEEF. I

encourage everyone to take a look at the WEEF webpage and look at the WEEF display case on the first floor of CPH to see what projects have been funded in the past. It is amazing how much of an impact WEEF has had on undergraduate engineering education.

With that all said, I would like to thank all of those who did donate their money to WEEF and anyone who wants to know more about WEEF don't hesitate to ask myself, or the assistant WEEF directors Stephanie Thompson or John Cuddihy. We will all be in the WEEF office at sometime or another in CPH 1323C (x4893)

### WEEF Funding - Winter 2000

CHEMICAL AND ENVIRONMENTAL CHEMICAL		Requested		Allocated
1 Upgrading of Analytical Facilities for ChE 032 Laboratory		6846		49
CIVIL and ENVIRONMENTAL CIVIL*				
2 Total Station		8500		57
3 Survey Equipment		6854		
4 CSRS-1 Cation Suppresser		1250		
5 HP5 GC Column		750		5
6 ICP Quartz Glassware		1100		
ELECTRICAL AND COMPUTER				
7 Audio Amplifier System		1588		
8 Semiconductor Parameter Analyzer	_	\$20000 (US)		
9 Telnet Server Upgrades	-	2130		14
10 Telnet Server Computers	_	3360		22
11 Monitor Upgrade	-	5760		12
12 Dynamometre Work Station Upgrade	_	8600		51
12 Dynamometre work Station Opgrade		3000		
ENVIRONMENTAL				
13 Spectrophotometer for Water Quality Analysis and Wastewater Treatment		10000		50
MECHANICAL				
MECHANICAL		40000		
14 Energy Dispersive X-ray Analysis System for Scanning Electron Microscope		19000		
15 Fuel Cell Demonstration Project		14653		
16 Robot Equipment Upgrade	_	36000		78
SYSTEMS DESIGN				
17 Monitors for Systems Design Computer Lab		1446		
,				
19 Multimedia Classroom Equipment	_	9400		72
GEOLOGICAL				
20 Rocks and Minerals		2400		1:
•				
MISC				
21 Engineering Student Shop	_	11684		55
22 Helix Lab Upgrade	_	5000		
Sub-Total Department	all \$	149,721	\$	48,19
	T	,	Ť	,
STUDENT				
23 GNCTR 2002		1000		4
24 GNCTR 2001		1600		8
25 Waterloo Aerial Robotics Group		7460		30
26 Midnight Sun VI Solar Car Project		5215		30
27 Formula SAE Project		6990		3.
28 UWAFT – Cold Start System		2358		1:
18 CART (Commuter Assisting Recumbent Tricycle)		2000		
Cub Tatal Chudant Cuann	۽ اي	00.000	•	40.04
Sub-Total Student Group		26,623 \$176,344.00		12,00
TOTA				\$60,190.0

### **OD"** Plan Unveiled in CBC Interview

PETER CRESSWELL 3A Off-stream Systems Design Engineering

In the boldest move ever made by an Ontario Government, the Mike Harris Torys have unveiled a new plan, called "Operation Downgrade" (or "OD" as it is sometimes called) to generate cash for financially strapped schools. In essence, "OD" calls for schools to begin liquidating their resources like a cheap Persian rug store going out of business.

"OD should be looked upon not as a long term solution, but rather as a temporary fix." said Mike Harris in a CBC interview yesterday. "We're not saying

'Sell the farm'; this is Ontario remember, not Saskatchewan. We're only saying, maybe there are some things that Universities could afford to lose."

When asked what he had in mind, the premier was slow to respond. Computers, classroom equipment such as excess chalk and tables, office supplies and potentially lumber from on-campus trees were all possible untapped revenue sources. "You could probably make a killing just by selling all the chairs from a typical University classroom."

"Also," continued Mr. Harris "I've been told that students don't even attend 40 hours of class a week! Everyone in the new productive Ontario should at least make 40 hours!" When it was pointed out to him by the interviewer that he himself barely averaged 20 hours per week of pseudo useful working hours, Mr. Harris went on the offensive. "That's beside the point! I imagine that if you gathered all the students at any one time, who were on campus and not in class, you could generate a tremendous amount of energy." Mr. Harris followed along this path, detailing a plan to enslave students, like Mexican sweatshop workers, and have them run a gigantic treadmill like generator whose resulting electricity, he was quick to point out, "could now be sold on the electricity

market due to deregulation!" A smug smile soon followed. Mr. Harris did say there could be some problems with the plan, though, and that he would "have to look at the numbers."

The interview concluded shortly after with a few words of advice for future University students. "Ontario continues to support post-secondary education but is always looking for new ways of funding it." What one piece of advice did he think would be the most useful for incoming students? "I'd buy a new pair of running shoes," he said.

(Editor's note for the humour impaired: the above was satire)

# **CS** + **ECE** = **Software Engineering**

Waterloo's software engineering program, scheduled to roll out in 2001, will be a joint venture between the Department of Electrical and Computer Engineering and the Department of Computer Science. Students will belong to both departments and take both ECE and CS courses.

The program offered will be compatible with the requirements of the Canadian Engineering Accreditation Board (CEAB) and graduates will have the opportunity to become licensed engineers.

The software engineering program is planned to have no net effect on the number of students enrolled in engineering. The new stream of software engineers will replace one of the three streams of computer engineering students admitted each year. Since 1996, the computer engineering program at Waterloo has tripled in

size, in part due to the Access To Opportunities Program (ATOP) instigated by the provincial government. Software

engineering students will be equivalent to computer engineering and computer science students under ATOP and as such there should be no net change to Waterloo's status under the policy.

The University

of Ottawa was the first school in Canada to offer a software engineering program. Their program is now in its third year and next year it will be reviewed by the CEAB for accreditation.

Right now, the proposal for the new

software engineering program is passing though a series of reviews by various committees on campus. It was approved

> by the Faculty Undergraduate Studies Committee on March 22, and the proposal will be presented again at Faculty Council. Then it's off to senate, which will have the final say on whether

**President** 

Ian Tien

3A Computer

There are a number of outstanding issues in regard to the program's implementation. How do we coordinate students split between faculties? How will the new program affect first year

resources? How will ECE and CS split tuition fees? Will softies be engineers or will they be mathies? Do we give them hard hats or pink ties during frosh week?

All things considered, software engineering seems to be a step in the right direction. It's important for Waterloo engineering to keep up with the times and to continue to expand the programs it offers. Computer engineering at Waterloo has only been around since the mid-1980s, environmental engineering (civil and chemical) received accreditation in the mid-1990s. Over the years, both program have risen to rank among the best in the

So what's in store for the Waterloo software engineering class of 2006? Only time will tell.

### **Light at the End of the Tunnel**

VP

**Internal** 

Ian Pollock

3B Mechanical

Well, the end of another term is upon us. Hopefully finals will go well, and we'll see everyone again in the fall (with

the exception of those cursed Watt the Flux guys). For myself, the joy of seeing the successful testing of our design project touched me deeply. Then there was a little incident, but never mind that now.

This issue will

come out just in time to give you something to read before going to EOT tonight. For those of you who have been directors this term, or are going to be directors next term, I'm sure you've all remembered the meeting in POETS this afternoon. Check the posters for the exact time. If you're still interested in being a director, talk to

one of the exec, or email engsoc@eng-

Recently, the wheelchair basketball

tournament went successfully, and potluck was, as

always, a lot of fun.

This term has been a busy one for me, so for those of you who were dying to spend more time with me but couldn't, I apologize.

Now that I've got the hang of this whole crazy thing called VPI, next term should be a breeze.....maybe. So I wish you all a fun summer. The next time you see me, I'll be a married man, so feel free to stop me in the hall and offer your condolences.

Adios.

### This Term in Review

VP

External

Micah Potechin

3B Systems Design

Ladies and gentlemen, this is my last VPX report of the Winter 2000 term, and as I expected, the term went extremely

Three conferences and two competitions were greeted with much enthusiasm by Waterloo engineering students. CCES, Canadian National conference, took place the

first week of January, with a strong delegation in attendance in Winnipeg. We sent two teams to Toronto to compete in the ESSCO'lympics, where they had a lot of fun. Hamilton hosted the second annual First Year Integration Conference in March, where Waterloo again sent a very strong delegation. Also in March were the Canadian Undergraduate Technology Conference, which Waterloo attended in fierce numbers, and OEC and CEC, where some of our best speakers and design teams brought home more than our "fair" share of trophies.

On campus, we had a large number of guest speakers throughout the term: a landmine expert and a space Engineer, some professors and some ambassadors from the PEO.

We also hosted some great events to raise some money and to raise the awareness of engineering within the community. Shadow Day, the first of these events, drew an amazing number of high school students to follow an engineering student this such a smooth term.

around for a day, to see what university is all about. Bus Push, Waterloo's contribution to National Engineering Week, raised

over \$2000 for the local charity Big Sisters of Kitchener-Waterloo. Then came Explorations, our opportunity to "show off", to let grade school children and their families see what engineers do. Campus Day, the uni-

versity-wide open house, followed the day after Explorations, and it was great seeing all the high school students wandering around learning more about our school, and about UW Engineering.

Two major events are happening during the summer when we will be away on work term. For Physics day at Canada's Wonderland, we have been asked to send a few volunteers to help grade school children with science, and to judge their design contests. E-mail me at <mipotech@engmail> if you would like to attend.

The summer conference is ESSCO Annual General Meeting. If you would like to attend a free weekend in Guelph, you can apply on the website <a href="http://engsoc.uwaterloo.ca/> before the end of

I hope everyone has a great summer at work. Thanks and congratulations to the people who organized, volunteered at, or attended these activities, for making

#### **WEEF Participation** Winter 2000

Class	Enrolled	Refunded	Participation
1B Civil	78	23	70.51
1B Comp	199	34	82.91
1B Mech	86	15	82.56
1B Env Chem	41	9	78.05
2A Chem	62	29	53.23
2A Elec	87	42	51.72
2A Mech	86	42	51.16
2A Syde	86	15	82.56
2A Geo	6	2	66.67
2A Env Civil	35	10	71.43
3A Civil	79	28	64.56
3A Comp	154	64	58.44
3A Mech	85	42	50.59
3A Env Chem	25	9	64.00
3B Chem	53	19	64.15
3B Elec	60	28	53.33
3B Mech	63	28	55.56
3B Syde	70	21	70.00
3B Geo	6	4	33.33
3B Env Civil	20	9	55.00
4B Chem	75	27	64.00
4B Civil	70	30	57.14
4B Elec	116	52	55.17
4B Comp	99	25	74.75
4B Mech	136	46	66.18
4B Syde	74	10	86.49
4B Geo	7	2	71.43
4B Env Chem	23	12	47.83
4B Env Civil	29	5	82.76
Total	2062	708	65.66

### No, I'm Not in Civil...

Hello, I hope your term is going well, I can not believe that it is almost over. I also hope that finals are not stopping you from enjoying the warmer weather. The

Directorship applications are online now and we are still looking for a Finance director, so all of you who are interested apply today. Contrary to popular belief I am not in 3A

Systems, I am in 2A Systems and just came in first place in the bridge project

(For any one who cares, the 2A systems class get into groups of 2-4 people and build a bridge 38 inches long and 3 inches wide out of one large sheet of mill board

and a bottle of white glue.) Good luck with finals and have fun on work term. My office hours are Thursday @ 1:30 to 2:30 and Friday @ 1:30 to 2:30.

(If I am not in the Orifice during those hours, check in POETS) My email is gsod-



VP **Finance** Sunny Sodhi 2A Systems Design

# Why I Don't Wear Tightie Whities

Short on time, money and three countries shy of a dozen, Mike, Eric and Jasen set off to conquer Venice. Little did they know, the next few days would be the most grueling that these mighty travelers would encounter. But before we conclude

our little journey, let me express my sincere hope that you have enjoyed my little tirades. If I have done my job, you have gleaned a few useful tidbits of information that may serve you well in



No Fixed Address

by Jasen Higgins RINGed

your future European adventure. But without further ado, the conclusion of our epic saga

LOOKING LOST Unless you are the among the most organized individuals, there will no doubt be occasions where you arrive in a city with absolutely no place to stay. After our overnight train from Vienna, we arrived in Venice in exactly that predicament. Weary from our excursion, we were ready to ditch our packs in a locker and go hostel hunting. Suddenly, 7 weeks of experience kicked in and we decided to keep our packs, walk around the train station looking lost and let accommodations find us. No sooner did we step out the front door and we were in hostel heaven.

ALBA D'ORO Imagine a campground, but with little huts and cabins to house backpackers. Low prices, (much cheaper than in Venice) an on-site store, restaurant, bar, and a great swimming pool. We found Alba D'Oro to be another one of those out-of-the-way gems that really made our stay. Clean and friendly, it's worth the 40-minute bus ride from the city. The buses don't tend to run from Venice all that late, but most guests compensate by partying at the bar until all hours of the morning. This we did on both nights, enjoying the company of a great bunch of Canadian girls, a Finn, a Swede, a Dutchman and three very conspicuous gents drinking Labatt Blue and smoking Craven A cigarettes. The latter turned out to be three Canadian soldiers on 72 hour leave from their peacekeeping duties in

Venice itself was all right, but having seen old buildings already we only spent about a half a day walking around. We did the gondola tour, which cost more than our accommodations for the night, but was worth while if for no other reason than to say we saw Venice from a gondola. The canals are a lovely shade of green... not entirely unappealing until you get down to water's level and realize that

these also serve as the city's sewers. So, the walk around was good but if you have a pigeon phobia, avoid the Piazza San Marco.

The sights and sounds of Venice were too much for our weary senses so the following day was spent enjoying

the beautiful sights of the beach at Jesolo. About an hour and a half bus ride from Venice, Jesolo is ideal for sitting, sunning, swimming and leering at beautiful Italian women. It was these women, and indeed all Italians that had the last laugh at the foolish Canadians, however. Next time, no matter how it looks, we will apply sunscreen to each other's backs. We didn't and wound up with matching sunburns in the centers of our backs.

CLOSE BUT NO SALAMI After a late night of drinking and carousing, we caught an early morning train to Genoa. Genoa has a reputation as a dirty port city but that couldn't be farther from the truth. We stayed at the HI hostel which, while a bit sterile, was clean and had a great view of the city. It is also within walking distance of some really cool fortress ruins on the tops of nearby hills. A great evening hike even if you got little sleep the night before and had almost nothing to eat all day. From the top of the hill, Genoa looks like something you might create in SimCity... lots of windy roads, bridges and tunnels. Very cool!

THE DEATH MARCH The next day we had our Cinque Terre death march. The dilemma was, we wanted to make it to Lucerne, Switzerland that night. In order to do so, we had to be up to catch the early train to Cinque Terre and then do a forced march through the 5 seaside towns in order to catch a train back to Genoa, then to Milan, then to Zurich and then back to Lucerne. Taking the train to the southernmost town of Riomaggiore the first kilometer back to Manarola was very easy... everything was very level, paved and wide. No problem we thought. Well, let me tell you, the five earths are NOT AT ALL level, paved or wide. The scenery is great, however, when you turn around for two seconds to take a look at it.

Some web sites suggest that Cinque Terre be seen and explored in two days or more. Labeled signposts suggest a brisker pace of 4.5 hours to do the entire trek. We blasted through the towns at a record breaking pace, halving the suggested time and earning many comments that we were going too fast. Nonetheless, people are friendly and may be greeted with a smile and a "bonjourno". That is, until you notice they have Mountain Equipment Coop logos on the packs. Then the natural comment is "Heeeeyyy, you're not Italian".

Arriving at Monterossa and the end of our trek, we discovered that we had a half-hour before the train arrived. By that time, my shirt was sodden with sweat, even though I only wore it half way. Needless to say the Ligurian Sea was looking pretty nice but I brought neither a bathing suit nor a towel. But hey, said I, we're in Italy... there's enough Speedos around that nobody's going to notice me stripping down to my jockey shorts and running into the sea. Well, if anybody did notice, they didn't care... it was worth it and the water was FANTASTIC.

THE DAY OF MANY TRAINS After my dip, I spent the rest of the day drying out on trains. The first train was from Cinque Terre to outside Genoa, then to the secondary train station where all our stuff was. Here we sprinted off the train, got our packs at the lockers and sprinted back. Getting yelled at in Italian, we narrowly caught the same train and headed to the main station where we could catch the train to Milan. From Milan we caught the train to Zurich... hoping to be able to make the 4-minute overlap connection to Lucerne. Long story short, 6 trains later we were in Lucerne and only minutes before the hostel canceled our reservation.

DEATH BY ALP The next day it was time to climb an Alp. Armed with food and water we set off up the 1600 vertical meters of mount Pilatus. After 900 meters we figured the gondola wasn't a bad choice for the last bit. Nonetheless, after a few hours checking out all the tourist trappings at the top, we set off down the other side. This put us on the wrong side of the mountain so we took the train back to Lucerne. Note for next time, climbing is rough on the muscles but going down is murder on the knees. Hungry and tired we found a Subway and promptly blew \$40

Canadian on three subs and three drinks. Our few remaining hours of daylight were spent enjoying the old town of Lucerne and trying not to blow any more money.

MORE TRAINS We spent a mere 30 hours in Switzerland, but that was about 15 minutes more than we bargained for. Before arriving in Basel to switch to the train bound for Paris we were delayed for 15 minutes on the tracks. Deciphering the German announcements, we understood the Paris train would be held for us. So there we were, 12:30 am, running through the Basel train station looking for what we understood to be track 33. Naturally, the extremely fit Canadians, all charged up from their mountain climbing the same day... were in the lead of the pack. Comically, when we made wrong turns, everybody behind us did as well. Soon enough, however, we found the train and enjoyed a Gravol induced coma for the six hours to Paris.

DESTINATION PARIS Oh Paris... at least we'll always have Paris. Let me tell you, it was nice to be in a city where the language is familiar. Ate too many baguettes but had a good time all in all. Saw the Eiffel tower, Arc de Triomphe, Louvre, Versailles, Notre Dame, Moulin Rouge and the Catacombs but narrowly missed getting into the cemetery to see Jim Morrison's grave. Had some fine French wine and even made it out for a swanky French dinner on our last night, complete with oysters and a snooty French waiter.

EPILOGUE We arrived back in Canada 58 days after we left and two days before convocation. At that glorious moment, I had \$50 to my name, about 1000 undeveloped pictures and memories to last a lifetime. The good news is that 9 months later I'm just over half way to paying off the trip. The bad news is, well, I want to go back but I have to work.

In 58 short days we covered 12 countries and about 40 cities and towns. Looking back, I wouldn't change a thing about the way we did it, we saw lots, did lots and had a great time wherever we went. If I were to travel again, however, I'd travel a lot more slowly. I'd take the time to savour the language, traditions and culture of each town visited. Most of all, however, I'd take time to meet the people. It is the people that give each place its joy and character. And, after the memories of museums and churches have faded, the smiles and faces of friends will remain.

# Who knew Education could be such a twrn の?

Grant MacEwan College, a leader in distance education, and Canadian Learning Television have teamed up to offer you an open elective in Human Sexuality, transferable to college and university degree programs across Canada!

Covering topics like sexual health, anatomy, and cultural behavior, learners of all ages can get an academic edge in issues of sex, gender, and sexuality without ever leaving the comfort of





Start whenever.
Work at your own pace.

Tune in to CLT's Sex Help! TV program Turn on to MacEwan's challenging three credit course in Human Sexuality.

**Drop out** of that boring class that has you snoozing in your seat.

For more info, or to register, call 1-888-440-4640 or check out the website at: http://humansexuality.gmcc.ab.ca/





#### **SPRING 2000 HOUSING**

St. Paul's United College offers LARGE single rooms with a meal plan (15 meals weekly) to UW students attending classes or on a work term. For information or an application please call: (519) 8851460 OR e-mail: <a href="mailto:stpaul@uwaterloo.ca">stpaul@uwaterloo.ca</a>.